A new generic record and distribution notes on two orchid species from Manipur, India[a]

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Abstract

A new generic record (*Cleisomeria*) and distribution notes on two orchid species (*Cleisomeria pilosulum* and *Dendrobium delacourii*) from India are provided with photographic illustrations to facilitate future identification.

Résumé

Premier enregistrement d'un genre et d'une espèce d'orchidées au Manipur (Inde) – Le genre *Cleisomeria*, avec l'espèce *C. pilosulum*, et *Dendrobium delacourii* sont enregistrés pour la première fois au Manipur. L'article en fournit une description accompagnée d'illustrations photographiques pour faciliter les identifications futures ; des notes sur la distribution de ces deux espèces sont également proposées.

Introduction

During a botanical exploration tour to the Yangoupokpi Lokchao Wildlife Sanctuary, Chandel district, Manipur, India for collection of rare, endemic, threatened and economically important plants under the *ex situ* conservation project of the Botanical Survey of India, Shillong, the first two authors collected two interesting taxa of orchids along with other angiosperms. On perusal of the available literature (Gagnepain, 1934;

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Seidenfaden, 1985; 1988) the identity of the plants was confirmed as *Cleisomeria pilosulum* (Gagnepain) Seidenfaden & Garay and *Dendrobium delacourii* Guillaumin respectively. Whereas the presence of *Cleisomeria pilosulum* in India is herewith recorded for the first time, *Dendrobium delacourii* has already been reported in India by Kumar & Manilal in 1994 and its presence was confirmed by Misra in 2007. Both publications, however, do not mention any locality and neither Kumar & Manilal nor Misra prepared any herbarium specimen. Thus, our discovery represents the first confirmed finding of the two species for India. The two herbarium specimens are deposited in ASSAM. The photographic illustrations (Fig. 1 and 2) are provided as a help for future identifications.

Taxonomic description

Cleisomeria pilosulum (Gagnepain) Seidenfaden & Garay

Botanisk Tidsskrift 67 : 120 (1972); Seidenfaden, *Bulletin du Muséum National d'Histoire Naturelle Sér.* 3, *Botanique*, 1-14 : 113 (1973); *Opera Botanica*, 95 : 131 (1988). Fig. 1.

Cleisostoma pilosulum Gagnepain, *in* Lecomte, H. (éd.), *Flore Générale de l'Indochine* 6 : 490, Fig 46 (1934).

Herbaceous epiphytic plant, 2.5 cm long; roots terete, sparsely branching, glabrous. Stems well developed, erect, rooting. Leaves 1.2-3 cm long, conduplicate, articulate, distichous, linear, thick-coriaceous, apex unequally bilobed. Inflorescence lateral, solitary, usually branching, many-flowered; peduncle elongate, pendent; rachis continuing the line of the peduncle, straight, finely pubescent. Pedicel and ovary 2.9 mm long. Floral bract 4 × 2 mm, much longer than the pedicel and ovary, densely pubescent, greenish yellow, often marked with maroon. Flowers resupinate, 4-5 mm long from the tip of the dorsal sepal to the tip of the spur, ca. 5 mm wide, greenish yellow with maroon and purple markings. Sepals and petals oblong, obtuse, finely pubescent abaxially, margin minutely toothed. Dorsal sepal 3 × 1.5 mm, with 1 branched nerve; lateral sepals 3 × 1.5 mm, with 1 branched nerve. Petals 2.2 × 1 mm, shorter than sepals, margin toothed. Lip 1.9-2 mm long from the tip of the spur to the tip of the midlobe, rigidly attached, trilobed with a distinct longitudinal median septum in the spur; spur saccate, parallel to ovary; side lobes erect, subobtuse; midlobe with a callus at the mouth. Anther 1 × 1 mm, globose, emarginate, glabrous. Column without column foot. Pollinia, 4 in two slightly unequal pairs,

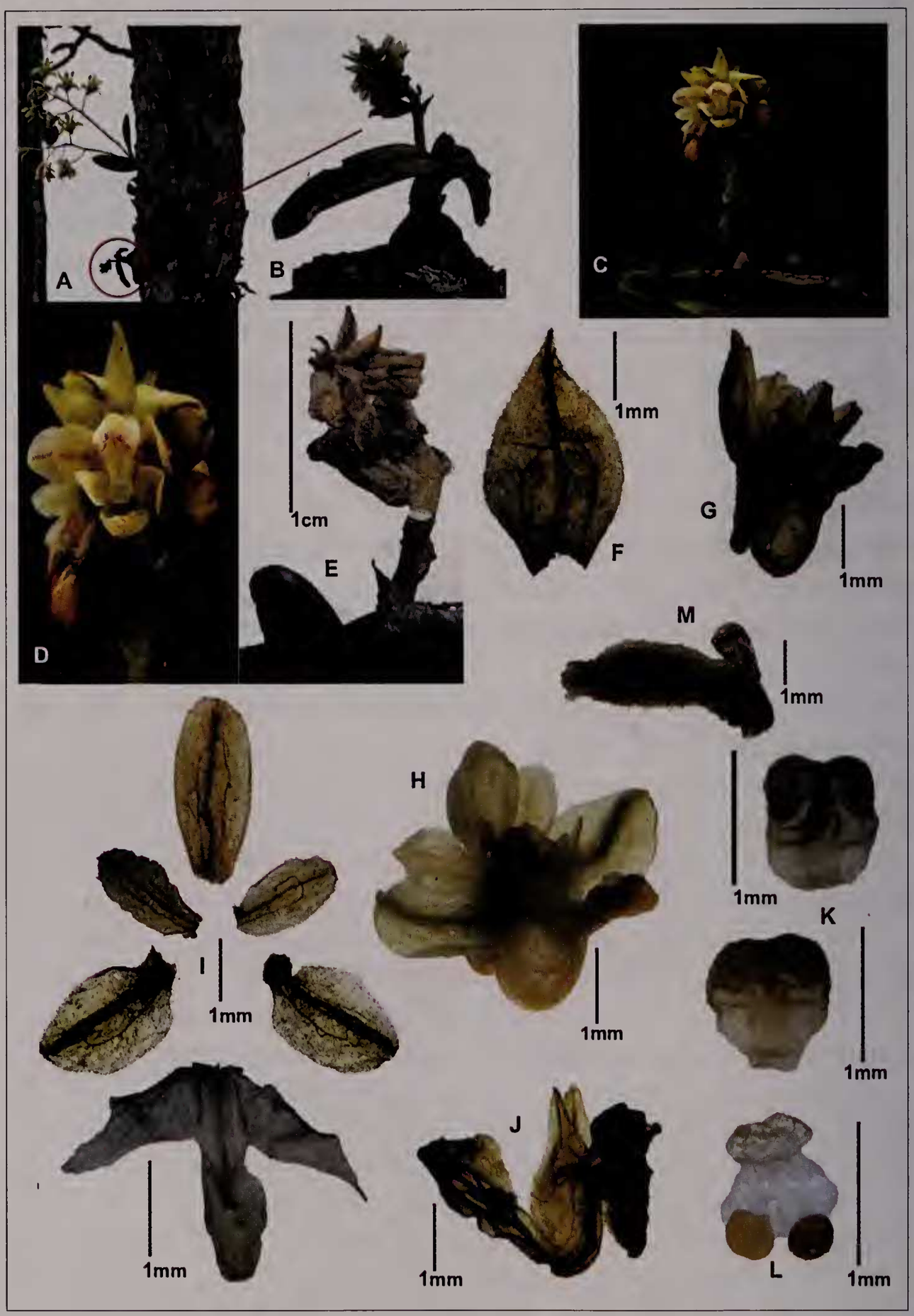

Fig. 1 : *Cleisomeria pilosulum*

A, B. Habit - C, D & E. Inflorescence - F. Floral bract - G & H. Flower side & front views – I. Floral perigone with lip - J. Lip attached to pedicel & ovary - K. Anther, dorsal & ventral views - L. Pollinia - M. Fruit. Ph. L.R.Meitei [A-D] & Chaya Deori [E-M]

0.3 mm broad, semiglobular, stipes longer than pollinia. Ovary cylindric, densely pubescent.

Type: Cambodia: Kompong Speu (*Poilane 17742*, P).

Flowering: During the month of June 2014 *Cleisomeria pilosulum* and *Dendrobium delacourii* were observed in bloom on the same host tree in their natural habitat.

Specimen examined: India: Yangoupokpi Lokchao Wildlife Sanctuary, Chandel district, Manipur, altitude 282 m, N 24° 15' 18.9", E 094° 17' 27.7", 21.06.2014, *N.N.Rabha & L.RMeitei 131143* (ASSAM).

General distribution: India (Manipur); Thailand, Laos, Cambodia, S. Vietnam.

Note: The genus *Cleisomeria* Lindley ex G.Don is easily recognized by the dense, many-flowered, often branched inflorescences with floral bracts that are much longer than the ovary and with densely pubescent rachis, ovary and flowers. The genus comprises only two species: *Cleisomeria lanatum* (Lindley) Lindley ex G.Don and *C. pilosulum.* The present record of *C. pilosulum* represents the first record of the genus in India.

***Dendrobium delacourii* Guillaumin**

Bulletin du Muséum National d'Histoire Naturelle. Paris 30 : 523 (1924); Seidenfaden, *Opera Botanica*, 83 : 128 (1985). Fig. 2.

Herbaceous epiphytic plant; roots filiform. Pseudobulb 3-4 cm long, sheathed. Leaves 2.5-6.5 × 0.5-1.5 cm, oblong, obtuse, obliquely two lobed at the apex. Inflorescence terminal with about 8-10 flowers; rachis 15 cm long. Floral bracts 5.5 × 1.5 mm, lanceolate acute, 1-nerved. Flower 18 mm long from the tip of the dorsal sepal to the tip of the mentum; mentum 4 mm long, pilose. Ovary and pedicel 23 mm long, whitish. Sepals and petals greenish yellow; dorsal sepal 13 × 4 mm, oblong lanceolate, obtuse, 5-nerved; lateral sepals 12 × 4 mm, lanceolate apiculate, (base 5.8-6 mm broad), 5-nerved. Petals 15 × 3-3.2 mm, narrowly oblong, apex undulate, 3-nerved, lateral nerves branched. Lip 13-14.5 × 11.2 mm, 3-lobed, side lobes oblong, rounded, obtuse, with many dense purple stripes; midlobe triangular acute, fimbriate, fimbrae 0.8-1,6 mm long, oblong, rounded; disc 3-lamellate, many veined from the base towards the apex of the side lobes. Column and foot 7-8.5 × 2.2 mm; attachment acute. Anther 1-2 × 1-1.2 mm, globose; front minutely toothed. Pollinia, 4, ellipsoid, 1.3-1.5 mm long, yellow.

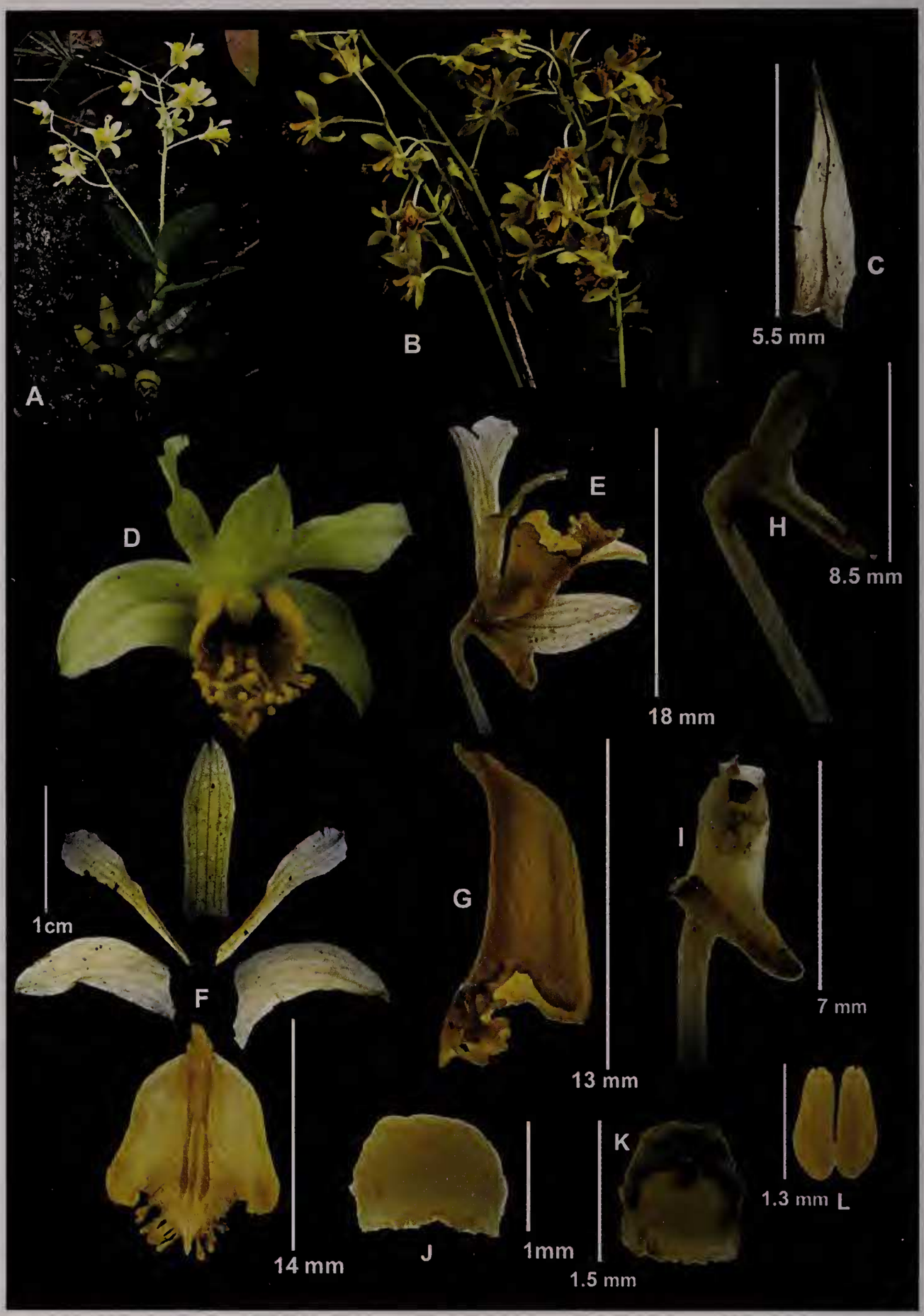

Fig. 2 : *Dendrobium delacourii*

A. Habit - B. Inflorescence - C. Floral bract – D & E. Flower, front & side views - F. Floral perigone with lip - G. Lip, side view - H. Column & foot, with anther – I. Column & foot – J & K. Anther dorsal & ventral views - L. Pollinia. Ph. L.R.Meitei [A, B, D] & Chaya Deori [C, E-L]

Flowering: June
Specimen examined: India: Yangoupokpi Lokchao Wildlife Sanctuary, Chandel district, Manipur, altitude 282 m, N 24° 15' 18.9", E 094° 17' 27.7", 21.06.2014, *N.N.Rabha & L.R.Meitei 131115* (ASSAM).
General Distribution: India (Manipur); Myanmar, Vietnam.
Note: The flower colour of *Dendrobium delacourii* varies from light greenish yellow to clear yellow with the fimbrae that are usually of a golden yellow, and side lobes with dense purple stripes. This taxon has been reported for India by Kumar & Manilal (1994) and Misra (2007), whereby in both cases no specific localities are given.

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